

January 2014

A Multi-Case Study of Student Perceptions of Online Course Design Elements and Success

Liz Fayer Dr.

Black Hills State University, liz.fayer@bhsu.edu

Recommended Citation

Fayer, Liz Dr. (2014) "A Multi-Case Study of Student Perceptions of Online Course Design Elements and Success," *International Journal for the Scholarship of Teaching and Learning*: Vol. 8: No. 1, Article 13.

Available at: <https://doi.org/10.20429/ijstl.2014.080113>

A Multi-Case Study of Student Perceptions of Online Course Design Elements and Success

Abstract

Course design is viewed as a critical component of student success in online classes. The purpose of this qualitative multi-case study was to examine student perceptions of course design elements that supported student success. The study included three data sources for each of the three cases: responses to questionnaires, written responses during online peer discussions, and course data/documents. The course studied was a prerequisite to student teaching in the post-baccalaureate online teacher certification program at a small, rural, Midwestern university. Guiding this research was the idea that a fundamental pedagogical shift is needed for online student success due to asynchronous communication and the necessity of extensive course pre-planning. Looking through this lens, findings unique to supporting online learning were uncovered. Case study students placed great value on strong course organization, time-flexible feedback, confidence in the instructor's content ability and consistent support, and relevance of both feedback and coursework.

Keywords

student success, online course design, student perceptions/values

Creative Commons License

Creative

Commons

This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0](#)

Attribution-

Noncommercial-

No

Cover Page Footnote

I would like to acknowledge Dr. Joanna Jones and Dr. Kathleen McKinney who both contributed invaluable editing and mentoring support, along with Dr. Cynthia Anderson for her support with IRB research approval.

4.0
License

Introduction

Online programs in higher education have proliferated dramatically in recent years including those designed for teacher certification (American Association of Colleges for Teacher Education, 2013; UDI Online Project, 2010; Web-based Education Commission, 2000). While giving students educational opportunities that otherwise might not be available to them, the environment for the online learner has been altered dramatically from face-to-face courses (LaPointe & Reissetter, 2008; Reissetter et al., 2007). According to UDI Online Project (2010), a fundamental pedagogical shift is needed to design academically sound online courses, as how a course is designed can dramatically affect student satisfaction and achievement (Fink, 2003; Milhelm, 2012; Westberry & Franken, 2012).

One of the themes of the Scholarship of Teaching and Learning (SoTL) is that course design is a central pedagogical concern. Fink (2003) describes the ability of instructors to create effective courses as a 'limiting factor' due to the lack of training in this area. In fact, it is often a problem in course design that is seen as negatively affecting higher education courses. Looking at course design problems through scholarly inquiry can bring about important and much needed change. The significance of this statement gains additional clarity with the understanding that a course can be either a powerful experience for a student or a trivial one (Price, 2013).

Kelly (2012, June) discussed the role of instructors in understanding the online learning experience from the student's perspective. Tunks (2012) suggested that instructors invite successful students to share their input about how to improve courses by providing questionnaires at the end of their course or after their courses are completed and make meaningful course changes as indicated by the data collected.

This exemplifies another of the major themes of SoTL, which is student voice. According to Felten (2013), one of the five tenets of good practice in SoTL methodology is conducting research into student learning in conjunction with students. SoTL practitioners working together with students demonstrate a shared responsibility, and engaging students in the inquiry process creates more effective, powerful, and authentic research. Werder and Otis (2009) support this theme in their belief that the course design process would benefit from new insights gained by including student, faculty, and community voices. Through scholarly inquiry and the collaboration of these multiple viewpoints, improvements to teaching and learning are possible.

Therefore, it is essential to better comprehend student perceptions of design elements that support success in online higher education courses. Understanding what students perceive supports their success can allow instructors to make deliberate decisions about the design of their courses (Kelly, 2013, August: UDI Online Project, 2010). In other words, student perceptions of the value of course design elements can be utilized to design courses for significant learning.

Purpose of the Study

The purpose of this IRB approved instrumental multi-case study was to gain an in-depth understanding of students' perceptions about four important course design elements. The data collected was triangulated using three data sources. The data from these three sources were analyzed, as per a multiple case study analysis, to determine the in-depth understanding of how post-baccalaureate online teacher certification students perceived the value of these four course design elements after successful completion of student teaching the following semester (Creswell, 2007; Merriam, 2009). The instrumental case study design was utilized in order to determine the 'how' and 'why' of a specific experience or phenomenon, thereby providing in-depth information about the research questions (Merriam, 2009).

The course that was researched in this study is scheduled the term prior to student teaching and contains pivotal content such as a practice Teacher Work Sample (TWS) to support student teaching success, as a final TWS is due at the end of student teaching. Since the program is relatively new, growing, and has now added a masters degree option, it is essential that student perceptions as to which course design aspects most supported their success were researched for deeper meaning or value.

Related Literature

Online courses are being researched separately from face-to-face courses in order to better understand online student needs. Gurung and Schwartz (2010) point out the importance of participating in area-specific pedagogical research to examine the concepts or processes that may impede learning. In a study by Reissetter, LaPointe, and Korcusk (2007), online learning was found to be a distinctly different experience from face-to-face learning suggesting that instructors should design their courses with specific elements that support online learning as a unique delivery method.

Online educators are interested in learning more about course design in determining student success. Gurung and Schwartz (2010) discussed the importance of teachers in predicting academic achievement. Research by

Ladyshevsky (2013) determined that instructors play a key role in the satisfaction of online learners through instructor presence and the creation and support of classroom social networks. An instructor's competent online presence proved to be valuable to a positive online classroom atmosphere, increasing student engagement and a sense of community. Offering encouragement, facilitation, and supporting student community interaction all played a role in improving engagement and learning, and therefore student success (Dreon, 2013; Young & Bruce, 2011). Hathcock (2012), in an article about mapping the essential elements of effective online learning, listed the three key elements as instructor presence, instructor feedback, and the organization of the course itself. The three of these together, Hathcock (2012) argued, will shape the student's experience in the course.

Another factor that can contribute to success occurs when students determine that a course is relevant to their future career. In fact, explicit sharing of important course skills or knowledge will contribute to student understanding of career choice success, and therefore increase course interest (Kelly, 2012, August). Using relevance as a guide, instructors can make decisions about their course design that directly affect student success. Sockalingham (2012) discussed that as adult learners are pressed for time, instructors need to be clear about expectations in order to support optimal time management. Research findings repeatedly emphasize that students in distance education programs are dissatisfied and cite course design as one of the main reasons (Milheim, 2012). According to Milheim (2012), lack of interaction or feedback from instructors and course design that does not support student-to-student interactions are aspects of online course design that need to be researched particularly to improve student motivation and efficacy (Bandura, 1993; Cornelius-White, 2010; Hathcock, 2012; Sockalingham, 2012). Massive Open Online Courses, for example, typically provide 'canned' lectures, automated quizzes and tests, an open structure, self-organized study groups and discussions, self-pacing, and a lack of instructor involvement and learning goals (EDUCAUSE, 2012). This type of course would leave out elements crucial to learning such as scaffolding, immediate feedback, and mediated learning by an expert according to work by Bloom and Vygotsky (Bloom, 1984; Gindis, 1999).

Therefore, researching which aspects of course design students believe supported their success is important pedagogical research (Gurung and Schwartz, 2010; LaPointe & Reisetter, 2008; UDI Project, 2010). As teachers are the mapmakers of their courses, they can learn more about how to support student success by using specific questioning techniques as a tool to uncover student values about course design elements (Kelly, 2012, June; Modesto Veludo-de-Oliveira, Ikeda, & Campomar, 2006; Reppel, et al., 2008; Trocchia, et al., 2007; Tunks, 2012).

Methodology

At a small, rural, Midwestern university students who already have a bachelor's degree can become teachers in a single year. This program was designed to create a quick avenue for degreed students to move into their own classrooms. The potential advantages of this program are its affordability, access to financial aid, online venue, and the ability to complete a teacher certification program without living near a university.

The course that was being examined in this study was one that occurs the semester before student teaching in the certification program. This course is pivotal to student overall success in the program, as students learn to create lesson plans and complete a practice TWS both of which are vital preparation for successful student teaching. Course Organization, Instructor Feedback, Self-grade Rubrics, and Coursework Relevance were chosen in order to focus the study on four specific course design elements that are discussed in the literature as important to online learners.

The course schedule and syllabus were sent to students prior to the beginning of the course via email and were also available the first day of class (see Appendix A). The course schedule contained a table with the dates and sixteen weeks on the left and all of the categories of assignments across the top including: The big idea, Supportive Coursework Assignments with Discussion Questions, Teacher Work Sample Assignments, and Lesson Plans/Videotaping Assignments. The syllabus also contained a great deal of additional information to support student organization and pre-planning including (a) The Course Description with Major Topics, (b) Instructional Methods, Course Requirements, (c) Course Goals, (d) Course Outline, (e) Student Learning Outcomes, (f) Course Evaluation/Grading Scale, and (g) Course/Topic Schedule.

The design of the course included chunking the lesson plans, unit design, and the TWS into more easily learned portions with scaffolding. Each week students used peer discussions to answer weekly discussion questions and respond to two classmates. These discussion questions were based on the required readings and media that were sequenced to support understanding, and instructor timely personalized feedback was given to scaffold learning. A discussion rubric was used to outline expectations and 'student self-grade rubrics' were used for each assignment to support student success.

An instrumental case study format was chosen to facilitate the understanding of how students perceived the importance of the four course design elements to their successful course completion (Merriam, 2009).

Success was defined as (a) a passing grade, (b) acceptable criteria-based online discussions, (c) the ability to create lesson plans and a unit consistent with Education Department requirements, (d) a videotaped lesson meeting specific criteria, and (e) an acceptable practice TWS.

Research began after the three case study students successfully completed their student teaching the semester following this course. The course that is being studied is one that was taken by all three of the case study students the fall prior to spring student teaching. The three students who were asked to complete the research earned a grade of 'A' in the course and had successful student teaching experiences the following semester (Tunks, 2012). They had also earned a 3.0 GPA or higher in their undergraduate degree coursework.

This study included three data sources for each of the three cases: responses to questionnaires sent to three students via email, written responses during online peer discussions, and assignments, course data, and course documents. The first source of data was the questionnaire (see Appendix B), which utilized a laddering technique in order to allow the researcher to 'dig deeply' into what course design elements students valued most (Reppel, Gruber, Szmigin, & Voss). This technique for qualitative research has been used to investigate personal values using a systematic hierarchal questioning structure (Modesto Veludo-de-Oliveira, et al., 2006). Section I of the questionnaire consisted of general questions about course design elements and student perceptions of success leading to more specific triad sorting questions in Section II, and finally a ranking table in Section III (Reppel, et al., 2008; Trocchia, Swanson, & Orlitzky, 2007). Section I was intended to activate background knowledge about the course design categories and begin the process of defining participant perceptions of the importance of these categories to their success. In Section II, each of the four course design components was presented to the participants who were asked to compare two of them in relation to the third until all possible combinations were addressed (i.e. Triad Sorting). Students were then asked, in Section III, to rank the four course design elements perceived as most to least helpful in supporting student success and write an explanation.

Each week students were asked to post their original answer to discussion questions based on course readings and media, and then respond to two other students using a rubric as a guide for success. The contents of these online discussions were the second source of data. Data were analyzed in the preferred qualitative method of simultaneously analyzing while continuing to collect data using coding analysis to assign categories (Creswell, 2007; Merriam, 2009).

The last data source was a record review consisting of course assignments, course data, and course documents as artifacts (Merriam, 2009). Course assignment rubrics and grades were used to determine student success and ultimate understanding of lesson plan design, unit design, and the practice TWS. These artifacts as well as student comments added in the online assignment Dropbox were used to support emerging questionnaire themes. Course data included, for example, the number of responses or timeliness of feedback as further evidence of questionnaire emergent themes (Merriam, 2009). Course documents, such as the course schedule were also used to support emerging student case study questionnaire themes.

These three data sources facilitated the process of within-case triangulation thus supporting construct validity (Guion, Diehl, & McDonald, 2012; Yin, 2003). Following the analysis, member checks were utilized as participants were asked to read and comment on their individual case study findings in terms of the emergent themes and values, and the supporting evidence. According to Gay (2006), this step addresses validity or the degree to which the qualitative study measured the intended research question.

In summary, the data from the three cases were analyzed as per Creswell's (2007) multiple case study analysis, which included first analyzing the three case studies independently to determine the course design elements that students perceived most supported their success (Table 1). Then, coding for multi-case themes using the data from all three case studies was examined for assertions and generalizations, or in this study, the value of online course design elements that best supported student success (Table 2). Multiple cases provided a more rigorous study due to the triangulation of the cross-case data (Merriam, 2009; Yin, 1994).

Results

When individual analysis of case study data was completed three students perceived that course organization and instructor feedback were integral to their success, two students perceived that coursework relevance was as well, while none of the three case study students valued self-grade rubrics as important. Though all student data were coded and analyzed, for brevity only representative excerpts from each category for each case study student were included below (Table 1).

Table 1:
Three Single-Case Analyses of the Four Course Design Elements

Course Design Element	Representative Excerpts of Coded Student Responses as Evidence
Course Organization	<p><u>Case Study Student #1:</u> <i>"One thing that really helped was being able to see everything laid out from the beginning. In comparing this course to others I have taken without a detailed syllabus available from day one, this course allowed me to pace myself and plan my time accordingly."</i> (Data Source: Questionnaire)</p> <p><u>Case Study Student #2:</u> <i>"Without course organization, I get very stressed out. If I do not have any organization within the class, none of the aspects matter to me. It's like Maslow's hierarchy of needs; I need the basic physiological needs before I can move onto anything else. To me, that's course organization."</i> (Data Source: Questionnaire)</p> <p><u>Case Study Student #3:</u> <i>"Since the planning phase is a process that teachers use to take content and information and decide how to present it to the students, which is very complex, the organization of the class allowed to break up this process and allow repetition on lesson planning that is refined with multiple encounters."</i> (Data Source: Questionnaire)</p>
Instructor Feedback	<p><u>Case Study Student #1:</u> <i>[The feedback] "...was actually phenomenal. The turn-around time for feedback was extremely fast. I found the in-text comments especially helpful, as I could see exactly what was being commented upon. Having the feedback allowed me to make corrections as I was beginning to work on the next assignment, allowing me to improve my chances for success."</i> (Data Source: Questionnaire)</p> <p><u>Case Study Student #2:</u> <i>"Thank you for the feedback. Writing lesson plans is definitely a whole new process for me, so I appreciate the constructive feedback and help. Here is my revised lesson plan along with my PPT and rubric."</i> (Data Source: Lesson Plan Assignment #1/Note from Student)</p> <p><u>Case Study Student #3:</u> <i>"I feel feedback was very important because matched with the natural flow of the course the teacher could supply information from an experienced lesson planner. This gave</i></p>

	<i>confidence to me as the student, as well as, information I could use to better develop my understanding. Without this personal information that applied to me directly, I would have had numerous misconceptions on how to format a lesson.” (Data Source: Questionnaire)</i>
Coursework Relevance	<p><u>Case Study Student #1:</u> This category was not a perceived as important for this student after coding was completed.</p> <p><u>Case Study Student #2:</u> <i>“In this class, lesson planning was extremely rigorous. However, now I know why. It is a very important part as a teacher. As a business education teacher at my new school, I am required to type out all my lesson plans weekly, and have them turned in by Monday morning. Having this experience in [the course] was very helpful.” (Data Source: Questionnaire)</i></p> <p><u>Case Study Student #3:</u> <i>[The] “...planning phase of teaching is vast and the class could have been easily focused on aspects not as important as the ones this class covered. If the material was not relevant to this phase of teaching, all of the other factors to me would be futile.” (Data Source: Questionnaire)</i></p>
Self-Grade Rubrics	This category was not perceived as important for any of the case study students after coding was completed. Therefore, this category was not carried forward as evidence for student themes (Table 2).

Multi-case themes using the data of all three case studies revealed one major theme with three minor themes for Course Organization, two major themes with four minor themes for Instructor Feedback, and one major theme and one minor theme for Course Relevance (Table 2). (Note: Major themes are shown numbered and in bold, while minor themes are bulleted underneath the major themes in Table 2 below.)

Table 2:

Multi-case Study Analysis: Course Design Elements Perceived as Most Valued

Course Design Element	Multi-case Themes
Course Organization	<p>1. Strong Course Organization</p> <ul style="list-style-type: none"> • Time Management and Planning/Detailed Organizational Documents and Clear Directions • Chunking of Complex Content/Coursework Unfolds and Builds Content • Teaching Tools and Realistic Understanding of Field
Instructor Feedback	<p>1. Time-Flexible Feedback</p> <p>2. Confidence in the Instructor's Content Ability and Consistent Support</p> <ul style="list-style-type: none"> • Timely Feedback • Increase Understanding of Difficult or Unfamiliar Concepts • Improve Understanding of Coursework/Correct and Resubmit Coursework • Build Confidence and Excitement/Reduce Stress
Course Relevance	<p>1. Relevance of Both Feedback and Coursework</p> <ul style="list-style-type: none"> • Support the knowledge about and understanding of teaching (i.e., 'The planning phase of teaching')

Discussion, Implications, and Limitations

Although course design is important to both online and traditional learning environments, researchers have shown that the four elements studied here need to be researched separately for online learning as a unique delivery method due to the necessity to extensively pre-plan and the challenge of asynchronous communication and delivery (Fink, 2003; Milheim, 2012; Reissetter, LaPointe, & Korcusk, 2007; UDI Online Project, 2010). The gap in the literature being addressed was: The value that pre-student teaching participants placed on specific course design elements in a post-secondary online teacher certification course, after successful completion of student teaching the term following the course studied. Asking participants to complete student teaching prior to completing this research allowed for additional perspective and experience in the classroom. The results of this multi-case study provide insights for online instructors about how to best support student success using course design elements as the vehicle for improvements.

Four major categories of what case study students perceived they valued most when reflecting on their successful course completion emerged when

the analysis was complete. While some of the findings of this study outline course design elements that both face-to-face and online students would value, the key to the importance of these findings to online course instruction is the full appreciation that instructors cannot simply move course materials or instructional strategies from a face-to-face setting to an online environment (Fink, 2003; UDI Online Project, 2010). Specific avenues to support online student success are discussed below.

One value was Strong Course Organization, which in the online environment demands a great deal of extensive pre-planning. The implications here include the necessity for instructors to pre-plan and provide highly organized course documents via email prior to the start date of the course and again in the course on the first day, permit access to all content modules from the beginning of the course allowing students optimal time management opportunities and support for the asynchronous learning environment, and the pre-planning of rigorous and supportive learning modules that target complex information and allow for multiple opportunities to master this content. The asynchronous design of online courses leads to special accommodations for student success.

A second critical value was instructors responding to student posts when students need support most. Time-flexible Feedback includes checking posts when students are most apt to be online. This requires flexibility due to online learning being a unique delivery method; instructors best serve their students by providing timely feedback to support the asynchronous learning environment. This may include checking for posts outside of the normal workweek schedule and more than once a day including weekends and holidays, and providing specific in-text (i.e., within student posts and assignments submitted online) positive and supportive feedback to scaffold learning and allow for the opportunity to resubmit assignments.

Confidence in the Instructor's Content Ability and Consistent Support was the third value category. Implications for this category include the careful pre-planning of modules that increase the understanding of difficult or unfamiliar concepts along with discussion questions that allow for instructor content support and extension of concepts or skills. Moreover when spontaneous situations arise, instructors can be ready to supply content clarification in a manner that supports confidence and excitement. Online students don't regularly 'see' their instructor or have consistent face-to-face communication. Therefore, the advantage of being able to talk to everyone 'on the fly' is non-existent and so are the non-verbal communication cues such as smiles and other social gestures that normally reassure (Weimer, 2013). Therefore, in order to reduce student stress asynchronously, the

online instructor needs to give consistent positive support so students know they can count on the instructor's responses when needed.

Relevance of Both Feedback and Coursework was the fourth value category. The implications for providing relevant feedback in an online environment due to the asynchronous format, include supplying each student with individualized feedback that may occur in sequential feedback loops used to obtain student understanding of complex material. As attested to by the Danielson Framework for Teaching (2007), good teaching is extremely complicated. Therefore, in order to bring pre-service teachers to the skill and conceptual understanding level needed for the K-12 classroom using an online format, a great deal of time and contact between instructor and student may be required. Another implication is that in order to support the knowledge and understanding about the planning phase of teaching, strong course pre-planning is necessary to create modules that not only allow for practice and building of concepts, but also have clear and guided expectations to avoid confusion.

Post analysis, it became clear that all of the four categories that students perceived to value were interrelated in this online course to support student success. In fact, the interactive nature of learning as described by Fink (2003) states that as the number of significant learning goals included in a course increases, the more they support one another and therefore, further student learning. Indeed, it would be the interaction of all of the emergent themes that would produce the greatest student success in this course.

Possible limitations to this research study include the fact that two of the three participants asked questions about Section II of the questionnaire. As each of the four design elements needed to be set up in questions where every possible combination was asked in a triad sort, the in-depth questioning was viewed as redundant. In both cases the participant's question about redundancy was answered by the researcher in terms of the importance of triad sorting to this research and not in terms of any of the categories, so that the researcher would not introduce bias. In addition, an open-ended approach to the questionnaire, instead of limiting the specific course design elements included may have uncovered different themes of additional design aspects. Lastly, as this is a relatively new program there were only ten official certification students enrolled. Of those only seven completed their student teaching the term following the researched course, which was a requirement of the research study. All six of the students that could have participated due to having completed their student teaching the semester following the course had final course percentages in the 90's. Therefore a limitation of this research may have been that all of the students that participated in the case study were high-performing, had undergraduate

degrees, and undergraduate GPA's of at least 2.6, which was the minimum requirement for acceptance into the program. Perhaps lower performing students would have expressed different values.

Thus, future research should include an open-ended structure to learn more about other course design features students value, a different type of technique for open-ended questioning, a mixed-study approach to introduce quantitative data, and additional specific affective categories such as motivation and engagement to more clearly understand these factors as they relate to online student success. In addition, studying the perceptions of course design of less successful students could yield interesting and useful information.

It is clear that instructors play an important role in producing quality online courses that are dynamic, significant, and support student success (Fink, 2003). SoTL principles of good practice include this understanding, as well as the valuable contributions to teaching and learning that can be made through scholarly inquiry and the inclusion of student voices (Felten, 2013; Werder and Otis, 2009). This type of pedagogical research is an exciting area of study and much more needs to be accomplished to understand how students learn best and how to create online courses that yield a meaningful experience (Gurung & Schwartz, 2010; Price, 2013).

References

- American Association of Colleges for Teacher Education. (2013). *The changing teacher preparation profession*. Retrieved December 28, 2013, from <http://aacte.org/news-room/press-releases/aacte-releases-first-national-data-report-on-teacher-preparation-profession.html>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychology, 28*, 117-148.
- Berg, B. (2007). *Qualitative research methods for the social sciences (6th ed.)*. Boston Allyn and Bacon.
- Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher, 13*(6), 4-16.
- Cornelius-White, J. H. D., & Harbaugh, A.P. (2010). *Learner-centered instruction*. London: SAGE Publications.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches (2nd ed.)*. Thousand Oaks, CA: Sage.
- Danielson, C. (2007). *Enhancing professional practice: A Framework for Teaching (2nd ed.)*. Alexandria, VA: ASCD.
- Davis, H. (2009). *Caring teachers*. Retrieved January 3, 2013, from

- <http://www.education.com/reference/article/caring-teachers/>
Dreon, O. (2013). *Applying the seven principles for good practice to the online classroom*. Retrieved February 26, 2013, from <http://www.facultyfocus.com/articles/online-education/applying-the-seven-principles-for-good-practice-to-the-online-classroom/>
- EDUCAUSE. (2012). *What campus leaders need to know about MOOCs*. Retrieved May 23, 2013, from <http://net.educause.edu/ir/library/pdf/PUB4005.pdf>
- Faculty Focus. (2013). *10 principles of effective online teaching: Best practices in distance education*. Retrieved May 23, 2013, from <http://www.facultyfocus.com/free-reports/principles-of-effective-online-teaching-best-practices-in-distance-education/>
- Felten, P. (2013). *Principles of good practice in SoTL*. Retrieved December 24, 2013, from <http://www.jstor.org/stable/10.2979/teachlearningqu.1.1.121>
- Fink, L.D. (2003). *A self-directed guide to designing courses for significant learning*. Retrieved December 24, 2013, from <http://www.deefinkandassociates.com/GuidetoCourseDesignAug05.pdf>
- Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational research*. Upper Saddle, NJ: Pearson.
- Gindis, B. (1999). *Vygotsky's vision: Reshaping the practice of special education for the 21st Century*. Retrieved December 28, 2013, from http://www.bgcenter.com/Vygotsky_Vision.htm
- Guion, L. A., Diehl, D. C. & McDonad, D. (2012). *Triangulation: Establishing the validity of qualitative studies*. Retrieved August 3, 2012, from <http://edis.ifas.ufl.edu/fy394>
- Gurung, R. A. R., & Schwartz, B. M. (2010). *Riding the third wave of SoTL*. *International Journal for the Scholarship of Teaching and Learning*, 4(2).
- Hammer (eds.) (2011). *Empirical Research in Teaching and Learning: Contributions from Social Psychology*. Malden, MA: Wiley-Blackwell.
- Hathcock, D. (2012). *Mapping success: Essential elements of an effective elements of an effective online learning experience*. Retrieved September 6, 2012, from <http://www.facultyfocus.com/topic/articles/online-education/>
- Keller, J. (2007). *ARCS model of motivational design*. Retrieved January 2, 2013, from <http://www.learning-theories.com/kellers-arcs-model-of-motivational-design.html>
- Kelly, R. (2012, June). *Understanding the online learning experience*. Retrieved June 10, 2012, from <http://www.magnapubs.com/blog/teaching-and-learning/understanding-the-online-learning-experience/>
- Kelly, R. (2012, August). *Five factors that affect online student motivation*.

- Retrieved August 10, 2012, from <http://www.facultyfocus.com/articles/online-education/five-factors-that-affect-online-student-motivation/>
- Kolowich, S. (2012). *Conflicted: Faculty and online education*. Retrieved February 8, 2012, from <http://www.insidehighered.com/news/survey/conflicted-faculty-and-online-education-2012>
- Ladyshevsky, R. K., (2013). *Instructor presence in online courses and student satisfaction*. Retrieved January 26, 2013, from <http://academics.georgiasouthern.edu/ijsofl/v7n1.html>
- LaPointe, L., & Riesetter, M. (2008). *Belonging online: Students' perceptions of the value and efficacy of an online learning community*. Retrieved June 23, 2012, from <http://editlib.org/p/24419/>
- Milheim, K. L. (2012). Toward a better experience examining student need in the online classroom through Maslow's hierarchy of needs model. *MERLOT Journal of Online Learning and Teaching*. 8(2), 159-171.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Modesto Veludo-de-Oliveira, T. M., Ikeda, A. A., & Campomar, P. (2006). *Discussing laddering application by the means-end chain theory*. Retrieved July 8, 2012, from <http://www.nova.edu/ssss/QR/QR11-4/veludo.pdf>
- Price, S. (2013). *Designing courses for significant learning: Voices of experience (New directions for teaching and learning #119)*. Retrieved December 24, 2013, from <http://www.nacada.ksu.edu/Resources/Journal/Current-Past-Book-Reviews/articleType/ArticleView/articleId/436/Designing-courses-for-significant-learning-Voices-of-experience-New-directions-for-teaching-and-learning-119.aspx>
- Reisetter, M., LaPointe, L., & Korcuska, J. (2007). The impact of altered realities: Implications of online delivery for learners' interactions, expectations, and learning skills. *International J. On E-Learning*. 6(1), 55-79.
- Reppel, A., Gruber, T., Szmigin, I., & Voss, R. (2008). Conducting qualitative research online – An exploratory study into the preferred attributes of an iconic digital music player. *European Advances in Consumer Research*, 8, 519-526.
- Sockalingham, D. (2012). Teaching and learning: Understanding adult learners' needs. Retrieved August, 6, 2012, from <http://www.facultyfocus.com/articles/teaching-and-learning/understanding-adult-learners-needs/>
- Trocchia, P. J., Swanson, D. L., Orlitzky, M. (2007). Digging deeper: The

- laddering interview, a tool for surfacing values. *Journal of Management Education*, 31, 713 doi: 10.1177/1052562906293611
- Tunks, K.W. (2012) *Transforming teaching through supplementary evaluation*. Retrieved August 20, 2012, from <http://www.facultyfocus.com/articles/faculty-evaluation/transforming-teaching-through-supplementary-evaluations/0n>
- UDI Online Project. (2010). *Student perceptions of online/blended learning* (Technical Brief# 03). Storrs: University of Connecticut, Center on Postsecondary Education and Disability. <http://www.udi.uconn.edu>
- Vygotsky, L.S. (1978) *Mind in Society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Web-Based Education Commission. (2000). *The power of the Internet for learning: Moving from promise to practice*. Retrieved February 8, 2013, from <http://www2.ed.gov/offices/AC/WBEC/FinalReport/WBECReport.pdf>
- Weimer, M. (2013). *Facilitating Effective Classroom Discussions, the devil is in the details*. Retrieved June, 24, 2012, from <http://www.facultyfocus.com/articles/teaching-professor-blog/facilitating-effective-classroom-discussion-the-devil-is-in-the-details/>
- Werder, C. and Otis, M.M. (2009). *Engaging student voices in the study of teaching and learning*. Retrieved December 24, 2013, from http://library.wvu.edu/ereserves/gossett_lib397_equalizing.pdf
- Westberry, N., & Franken, M. (2012). *Co-construction of knowledge in tertiary online settings an ecology of resources perspective*. Springer Science + Business Media. Published Online: 29 March 2012.
- Yin, R. (1994). *Case study research: Design and methods (2nd ed.)*. Thousand Oaks, CA: Sage.
- Yin, R. (2003). *Case study research: Design and methods (3rd ed.)*. Thousand Oaks, CA: Sage.
- Young, S., & Bruce, M. A. (2011). Classroom community and student engagement in online courses. *Journal of Online Teaching and Learning*. 7(2).

Appendix A:

Course Syllabus Pedagogical Excerpts Supporting Student Statements of Success: (a) The Course Description with Major Topics, (b) Instructional Methods, Course Requirements, (c) Course Goals, (d) Course Outline, (e) Student Learning Outcomes, (f) Course evaluation/Grading Scale, and (g) Course/Topic Schedule.

Course Description:

This course serves as an introduction to the characteristics and

exceptionalities of adolescents and is required for all middle and secondary education majors. The student will learn to understand the major influences on adolescent development and behavior including biological, cultural, peer, and family conditions as well as how educational programming practices aid adolescents in the development process. In addition, students will identify retardation and developmental disabilities, speech and hearing disabilities, other health impairments, and giftedness. Finally, students will study local, state, and national administrative and legislative provisions that support adolescents with these conditions.

Major Topics:

This course will focus on:

- Identification of what effective teaching looks like and sounds like
- The skills and strategies involved in planning, instruction, and evaluation
- Classroom management strategies
- Communication issues and skills (expectation of skill demonstration in class participation and assignment completion)
- A Professional Framework for Teaching (expectation of demonstration of professional behavior in meeting course requirements)

Instructional Methods

This course will include class sessions, which will guide the learner into the investigation of:

- The characteristics of an effective teacher
- Positive expectations for student success
- Planning and preparation
- Classroom management
- Instructional design and delivery
- Reflection as a means to enhance teaching and learning
- Strategies to promote active learning in a cooperative environment

Course Requirements

Required texts for the course:

Danielson, Charlotte, (2007). Enhancing Professional Practice, Alexandria VA, ASCD.

Wong, H.K., & Wong, R.T. (2009). The First Days of School: How to be an Effective Teacher. Mountain View, CA: Wong Publications.

Supplementary Materials:

Wiggins, G., McTighe, J. (1998). Understanding by Design, Alexandria, VA, ASCD.

Readings as provided by instructor and review of the literature for research and scholarly reflection.

Course Goals

Students will be able to:

- Demonstrate knowledge of, and technological skills in, planning, teaching, and assessing learning using a variety of instructional strategies, technological tools, and classroom management techniques.
- Demonstrate proficiency in lesson development and delivery using constructivist
- Instructional strategies to engage the learner
- Recognize the qualities of an effective teacher and reflect on their own practice as an emerging teacher in each of the professional teaching domains
- Problem solve challenging teaching/education scenarios through synthesis of learning covered in this course
- Learn and be able to apply learning to the specific factor development of the Teacher Work Sample

Course Outline

The following are topics and foci for learning to be included in this course. Other topics and areas of interest could be added in reaction to student need, environmental changes, or systemic change.

- Ø Framework for Teaching (Four Domains of the Professional Teacher) investigation
- Ø Effective teaching practice focusing on teacher planning and preparation
- Ø The *Teacher Work Sample*- Factors 1-6
- Ø Organization of cohesive units through the process of backward design
- Ø Lesson planning (including outcomes, assessment and reflection practices)
- Ø Teaching strategies for engaged-learning in a diverse classroom
- Ø Cooperative Learning as an instructional tool
- Ø Classroom management (methodology, implementation and strategic intervention)
- Ø Effective teaching practice through effective classroom management

Student Learning Outcomes

The following outcomes are described and followed by the method in which these outcomes will be demonstrated. The relevant INTASC Standards (Interstate Teacher Assessment and Support Consortium) are listed for each outcome.

- The student will be able to identify and demonstrate the essential components of planning and preparation for teaching, including demonstrating knowledge of students, selection of instructional goals, knowledge of resources, designing and reflecting on coherent instruction. (Professional reading, reflection, group discussion, Factors 2, 3) STANDARDS:INTASC: 2, 3, 4 & 7
- The student will be able to identify and demonstrate the essential components of creating a classroom environment including establishing respect and rapport, establishing a culture for learning, designing and managing classroom processes and procedures, managing student behavior, organizing physical space. (Professional reading, reflection, group discussion - Factor 4) STANDARDS: INTASC: 4, 5 & 7
- The student will be able to identify and demonstrate the components of instruction including communicating clearly and accurately, using questioning and discussion techniques, actively engaging students in the process of learning, providing feedback to students and demonstrating flexibility and responsiveness. (Video tape project, professional reading, reflection, group discussion - Factor 3, 4) STANDARDS: INTASC: 1, 2, 3, 4, 5, 6, & 8
- The student will be able to identify and demonstrate the professional responsibilities of a teacher including reflection on teaching, maintaining records, communicating with families, contributing to the school and community, and growing and developing professionally. (Professional reading and reflection) STANDARDS:INTASC: 9 & 10

Course Evaluation/Grading Scale

Class Discussion (4 points weekly)

Students will be required to engage in online discussion weekly.

- Students must answer discussion questions and post responses by Wednesday.
- Responses must demonstrate the student's knowledge of the content and how they can use that information in an educational setting.
- Students must respond to a minimum of two group members by Friday.
- Responses cannot be a simple I agree or great post. They must add to the discussion response or respond with a personal reflection. Discussion questions that correspond with the weekly module will be posted on Sunday. Original posts need to be a minimum of 400 words with references cited. Response posts to 2 classmates need to be a

minimum of 150 words each with thoughtful discussion provoking insights.

Discussion Rubric for ALL Weekly Discussions:

4 Points for each Week	Requirements:	Tips for Success:
2 Points for original post to group. These need to include complete answers to all discussion questions asked at the bottom of the module.	400 Word Minimum for entire post (i.e., 400 word minimum to answer all discussion questions, but you may need more to fully and completely answer questions).	Clear and unambiguous evidence of understanding and ideas are related directly to the reading materials; references to or quotes from the read materials (text or other resources) are included in the response and provide support for the discussion.
2 Points for thorough, complete, and thought-provoking responses.	150 Word Minimum for responses to 2 group members (i.e. total of 300 word minimum). Note: I encourage you to respond to all of the people in your group as it builds collegiality, however any posts over the 2 – can be of any length. Please clearly label your 2 posts that are to be graded to receive full credit.	Intriguing and thoughtful responses to two peers that extend the discussion and understanding of the material.

Additional Requirements for ALL posts:

Responses occur during the suggested time frame and frequency.

Responses are positive and enhance interaction among the group members.

Late points will be deducted.

TWS Reflection Assignment (20 points):

Students will become familiar with the Teacher Work Sample TWS to understand the purpose for SEED 408.

Project Rubric: Self-Grade and Submit with Project

1. Use to complete assignment.
2. Indicate points earned per category.
3. Add comment to support your choices (Meta-cognitive Reflection)

	Student and/or Teacher Comments:	Excellence 4	Quality 3	Baseline 2	Unacceptable 1
<u>Thoroughness:</u> Project is central to the important understandings in the course materials, as well as accurate, and complete		Selected content of assignment is central, accurate, and well explained.	Most of the content of assignment is central, accurate, and well explained.	Some of the content of assignment is central, accurate, and well explained.	Very little of the content of assignment is central, accurate, and well explained.
<u>Idea Development:</u> Project shows evidence of meaning making		Thoughtful development of meaning in working with the content.	Some evidence of development of meaning.	Little evidence of development of meaning.	No evidence of meaning making.
<u>Thoughtfulness:</u> Project shows application of student ideas and practical application of course materials		Injection of ideas are well connected to the course materials.	Connection of ideas and course materials are evident, but not complete.	Little evidence of connections of ideas and course materials.	No evidence of connection of ideas and course materials.
<u>Writing Quality</u>		Writing with clear ability to express thoughts, and point of view. Excellent mechanics. Well organized.	Development clear, and connections coherently made most of the time. Excellent mechanics with few exceptions.	Adequate writing that conveys meaning. Adequate organization. Generally good mechanics.	Inadequate. Lacks organization. Unclear expression of ideas. Poor mechanics.

(Note: Used with permission by Dr. M. Reisetter)

Total Points: _____/16; Convert to % for grade. Comments:

Lesson Design and Reflection Project (80 Points)

Students will design 4 complete lesson plans (each lesson plan will be assigned point value/rubrics).

****Two (2) Lesson Plans (15 points ea.)**

For the first two of the four lesson plans, students will write a complete lesson plan with a peer review and perform at 90 % mastery. Mastery learning will be the guiding principle, requiring mastery to be reached before moving to the next lesson-planning step. A rubric will be provided.

****One (1) Lesson Plan (20 points)**

In the third lesson plan, students will create a lesson plan utilizing

cooperative learning and active learning strategies. Student will present completed lesson plans to a peer for feedback and review. A rubric will be provided.

****One (1) Lesson Plan (30 points)**

This lesson plan is the grand finale and will be what you consider to be your best work. The plan should include a reading strategy, an inter- or intra-disciplinary activity, and include active learning strategies. This lesson plan must also be used for the videotape project (see below). A rubric will be provided.

Video Tape Teaching Project (20 points)

The student will be asked to videotape a presentation of the final lesson plan for peer review and submission to the instructor. This lesson is “capstone” plan and will reflect cumulative expertise of the learner. Self –reflection, one page in length, will follow the lesson plan delivery. A rubric will be provided.

TWS Factor 1- Contextual Information and Learning Environment (13points)

TWS Factor 2 - Learning Outcome Project (20 points)

TWS Factor 3 - Instructional Design Project (33 points)

TWS Factor 4 - Classroom Management Project (21 points)

TWS Factor 5 - Analysis of Assessment Procedures and Impact on Student Learning (20 points)

TWS Factor 6 - Reflection and Self-Evaluation (5 Points)

With the exception of Factors 5 & 6 the instructions for completion of the TWS factors is explained in the Teacher Work Sample Handbook. The rubrics provided within the handbook will be used to grade your projects.

Evaluation Summary

Class Discussion (4 X 14 with 20 points for Module 15)	76
TWS Reflection Assignment	20
Lesson Planning Project	80
Video Tape- Teaching Project	20
Contextual Information and Learning Environment (Factor 1)	13
Learning Outcome Project (Factor 2)	20
Instructional Design Project (Factor 3)	33
Classroom Management Project (Factor 4)	21

Total 283 Points

Grading Scale (%)

Grades will be based on a percentage of the total points possible. See course requirements below for point distribution.

A=92%-100%

B=84%- 91.9%

C=76%-83.9%
 D=70%-75.9%
 F= 00%-69.9%

Course Schedule:

Week/ Dates	Big Idea	Supportive Coursework Assignments with Discussion Questions	Teacher Work Sample Assignments	Lesson Plans/ Videotaping Assignment
Week 1	Initial information for success!	Module 1: Course introductions Time management plan		
Week 2	Professional Expectations for Teachers	Module 2: Danielson Chpts. 1-4 Constructivism Article	TWS Reflection Assignment due to Dropbox by Sunday 11:59 pm Please turn in with rubric that you have self-graded.	
Week 3	Effective Teaching	Module 3: Wong's Unit A Chelonda Seroyer's Story – Video Read Beginning of School PPTs		
Week 4	Diverse learners and learning	Module 4: Wong's Unit B Gardner's Multiple Intelligences	Begin working on TWS Factor 1 (due next week)	
Week 5	Effective Unit Design	Module 5: Understanding by Design (UbD) Start Unit Design Put Understanding First – Article Mager's Tips on Instructional Objectives	TWS Factor 1 due to Dropbox by Sunday 11:59 pm Begin Factor 2 due in 2 weeks	
Week 6	Effective Collaboration	Module 6: Unit Design Con't. Peer Review	TWS Factor 2 due next week	
Week 7	Effective Lessons	Module 7: Lesson Planning Six Common Mistakes in Writing Lesson Plans Lesson Plan Format	TWS Factor 2 due to Dropbox by Sunday 11:59 pm	
Week 8	Effective Instruction	Module 8: Instructional	Begin looking at TWS Factor 3	1 st Lesson Plan due on

		Strategies/Assessment Some Basic Lesson Presentation Elements		Sunday at 11:59 pm
Week 9	Engagement and Learning	Module 9: Wong's Unit D Motivating Students – PDF	Begin thinking about how your instruction design table for TWS Factor 3 must be based on the learning outcomes from TWS Factor 2	2 nd Lesson Plan due on Sunday at 11:59 pm
Week 10	Effective Cooperative Learning	Module 10: Cooperative Learning Making Cooperative Learning Work	Start TWS Factor 3	3 rd Lesson Plan due on Sunday at 11:59 pm
Week 11	Strengthening Strategies for Learning including Integration	Module 11: Understanding Rubrics Inter-Intra Discipline Review Reading Strategies Review Intro for Videotaping Assignment	Continue working on TWS Factor 3	4 th Lesson Plan due on Sunday at 11:59 pm
Week 12	Completion of TWS Factor 3	Module 12: Reread materials for TWS Factor 3	TWS Factor 3 is due to Dropbox by Sunday 11:59 pm	
Week 13	Effective Classroom Management	Module 13: Reading, but no discussion questions: Classroom Management: Wong's Unit C TWS Factor 4		Videotaping Assignment is due at my office on Monday by 11:59 pm
Week 14	Evidence that Teaching is having an Impact on Learning	Module 14: Analysis of Assessment and Impact on Student Learning	TWS Factor 4 is due to Dropbox by Sunday 11:59 pm	
Week 15	School Environment	Module 15: School Environment Wong's Unit E	Adaptation of TWS Factor 5	
Week 16	Teacher Reflection	TWS Factor 6 Reflection and Self-Evaluation IDEA Survey	Adaptation of TWS Factor 6	

Appendix B: Post-Pilot Questionnaire

Questionnaire Protocol Project: Online Course Success and Course Design

Date Questionnaire Sent: _____

Place and Strategy: Online Questionnaire Using Laddering Strategy

Interviewer: _____

Interviewee: _____ **Date Completed:**

Position of the Interviewee: Post teacher certification program participant

Brief Description of Project: This multiple case study project is being conducted via laddering questionnaires with three students that successfully participated in an education course the semester before student teaching in order to determine how these students perceived that course design supported their success. Class discussion data and assignment artifacts will be used for triangulation. The questionnaire was critiqued and modified via a pilot study of 2-3 other students in the same class.

I. Questions (Ladder Initial General Questions):

Directions: In this section your general ideas about course design and its' aspects will be explored in terms of how you perceive them affecting your success in SEED 408. Please take as much time and space, as you need, to answer the questions completely.

1. What is your perception of the *overall course design* in SEED 408 and its' contribution to your success in the course?
2. What is your perception of *course organization including a structured syllabus, course schedule, course checklist, community building with peers, and clearness of directions* in SEED 408 and its' contribution to your success in the course? (i.e., course organization)
3. What is your perception of the *speed of the feedback and the substance of the feedback from the instructor* in SEED 408 and its' contribution to your success in the course? (i.e., teacher-to-student interaction)
4. What is your perception of the *rubrics given ahead of time and self-grading rubrics prior to handing in assignments* in SEED 408 and its' contribution to your success in the course? (i.e., course organization and teacher-to-student interaction)

5. What is your perception of *coursework relevance* to your current success in lesson planning (i.e., *application of content to assignments*) and execution and your future as a teacher in SEED 408 and its' contribution to your success in the course? (i.e., *course organization*)

II. Questions (Ladder Elicitation Stage: Triadic Sorting):

Directions: In this section, your perceptions of course design aspects will be compared and contrasted in terms of how you perceive them affecting your success in SEED 408. Please refer to your answers from the above 5 questions to guide your answers in this section. Please take as much time and space, as you need to answer the questions completely. The following questions are in the form of a triadic sort. This means that "...three distinguished elements are presented to a respondent, who is asked about similarities and differences that two of them have in relation to the third." (Modesto Veludo-de-Oliveira, Ikeda, Campomar, 2006)

1. What is your perception of *course organization* (number 2 above) **as opposed to** *feedback* (number 3 above) and *rubrics* (number 4 above) in SEED 408 and your success in the course?
2. What is your perception of *course organization* (number 2 above) **as opposed to** *feedback* (number 3 above) and *coursework relevance* (number 5 above) in SEED 408 and your success in the course?
3. What is your perception of *course organization* (number 2 above) **as opposed to** *rubrics* (number 4 above) and *coursework relevance* (number 5 above) in SEED 408 and your success in the course?
4. What is your perception of *feedback* (number 3 above) **as opposed to** *rubrics* (number 4 above) and *coursework relevance* (number 5 above) in SEED 408 and your success in the course?
5. What is your perception of *feedback* (number 3 above) **as opposed to** *course organization* (number 2 above) and *rubrics* (number 4 above) in SEED 408 and your success in the course?
6. What is your perception of *feedback* (number 3 above) **as opposed to** *course organization* (number 2 above) and *coursework relevance* (number 5 above) in SEED 408 and your success in the course?
7. What is your perception of *rubrics* (number 4 above) **as opposed to** *course organization* (number 2 above) and *feedback* (number 3 above) in SEED 408 and your success in the course?
8. What is your perception of *rubrics* (number 4 above) **as opposed to** *course organization* (number 2 above) and *coursework relevance* (number 5 above) in SEED 408 and your success in the course?

9. What is your perception of *rubrics* (number 4 above) **as opposed to** *coursework relevance* (number 5 above) and *feedback* (number 3 above) in SEED 408 and your success in the course?
10. What is your perception of *coursework relevance* (number 5 above) **as opposed to** and *course organization* (number 2 above) and *feedback* (number 3 above) in SEED 408 and your success in the course?
11. What is your perception of *coursework relevance* (number 5 above) **as opposed to** and *course organization* (number 2 above) and *rubrics* (number 4 above) in SEED 408 and your success in the course?
12. What is your perception of *coursework relevance* (number 5 above) **as opposed to** *feedback* (number 3 above) and *rubrics* (number 4 above) in SEED 408 and your success in the course?

III. Final Rating: (Rate your perceptions about what most contributed to your success to what least contributed to your success.)

Directions: Laddering is useful in bringing to the surface people’s values (Sections I and II above). Therefore, using your answers from the above laddering questions, please rate your perceptions as to what was most important (i.e., Number 1) to what was least important to your course success (i.e., Number 4) (Modesto Veludo-de-Oliveira, Ikeda, & Campomar, 2006).

Description	Rate 1 - 4	Explanation for Rating
<i>Course organization including a structured syllabus, course schedule, course checklist, community building with peers, and clearness of directions</i>		
<i>Speed of the feedback and the substance of the feedback from the instructor</i>		
<i>Rubrics given ahead of time, self-grading rubrics</i>		

<i>prior to handing in assignments, and teacher feedback on assignments</i>		
<i>Coursework relevance</i>		

(Modesto Veludo-de-Oliveira, Ikeda, & Campomar, 2006; Creswell, 2007; Reppel, Gruber, Szmigin, & Voss, 2008)

Note: Though the word 'rating' is used on the questionnaire in Section III, respondents were actually ranking the items as per the directions.